



2019-2020 Science Supply List

Science 300

Table of Contents

| | |
|------------------------------------------|---|
| UNIT 1: YOU GROW AND CHANGE | 1 |
| UNIT 2: PLANTS | 1 |
| UNIT 3: ANIMALS: GROWTH AND CHANGE | 2 |
| UNIT 4: YOU ARE WHAT YOU EAT | 3 |
| UNIT 5: PROPERTIES OF MATTER | 3 |
| UNIT 6: SOUNDS AND YOU | 4 |
| UNIT 7: TIME AND SEASONS..... | 4 |
| UNIT 8: ROCKS AND THEIR CHANGE | 5 |
| UNIT 9: HEAT ENERGY | 5 |
| UNIT 10: REVIEW | 6 |

UNIT 1: YOU GROW AND CHANGE

| Assignment | Summary | Video Demo | Supplies |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Experiment: Breathing Patterns | In this experiment, you will measure breathing patterns and learn why the body needs oxygen. | No | <ul style="list-style-type: none"> a clock with a second hand |
| *Experiment: Your Lungs | In this experiment, you will feel how lungs move during breathing | No | <ul style="list-style-type: none"> a sponge |
| Experiment: Taste Test | In this experiment, you will compare how foods pass through a paper towel | No | <ul style="list-style-type: none"> cocoa salt teaspoon a small drinking glass cone-shaped coffee filter or paper towel a large drinking glass half full of water |
| Experiment: Taking Your Pulse | In this experiment, you will practice taking a pulse and understand that a pulse tells how fast the heart is beating. | No | <ul style="list-style-type: none"> a timer, a stopwatch or a clock with a second hand. |
| *Project: Bone Numbers | In this project you will compare the bones in your body to the bones in a friend's body. | No | <ul style="list-style-type: none"> a friend who will let you count the bones in their foot. |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 2: PLANTS

| Assignment | Summary | Video Demo | Supplies |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Experiment: Root Hairs | In this experiment, you will study root hairs on a plant. | No | <ul style="list-style-type: none"> a small plant a magnifying glass |
| *Experiment: Study a Stem | In this experiment, you will study the stem of a plant | No | <ul style="list-style-type: none"> a small jar with water food coloring a celery stem magnifying glass |
| Experiment: Grow Some Plants | In this experiment, you will test how light affects plant growth | No | <ul style="list-style-type: none"> two small potted plants or bean seedlings |
| Experiment: Watch Bean Seeds Grow | In this experiment, you will understand that plants come from seeds and list the things seeds need to grow. | No | <ul style="list-style-type: none"> a jar with water five paper cups |

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| | | | <ul style="list-style-type: none"> • about fifteen (15) lima beans • potting soil • wet paper towel |
| *Experiment: Plant a Piece of Potato | In this experiment, you will study the growth of a potato plant. | No | <ul style="list-style-type: none"> • a white potato (one with eyes on it) • a pot of soil |
| *Experiment: Bean Plant | In this experiment, you will study the growth of a bean plant and understand that some parts of a plant grow faster than other parts. | No | <ul style="list-style-type: none"> • a glass jar • wet paper towel • felt marker • three lima beans |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 3: ANIMALS: GROWTH AND CHANGE

| Assignment | Summary | Video Demo | Supplies |
|-----------------------------------------------|--------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Experiment: Hourly Temperature Changes | In this experiment, you will study how temperature changes with time. | No | <ul style="list-style-type: none"> • a clock • a thermometer |
| *Experiment: Heat Energy Comparison | In this experiment, you will compare the energy needed to heat water and soil. | No | <ul style="list-style-type: none"> • two-pint glass jars or bowls • two thermometers • ruler • soil |
| *Project: Desert Locations | In this project you will identify deserts around the world. | No | <ul style="list-style-type: none"> • encyclopedia |
| Project: Vertebrate Chart | In this project you will practice grouping vertebrates into different groups. | No | <ul style="list-style-type: none"> • paper |
| *Project: Sort Birds By Type Of Food They Eat | In this experiment, you will practice grouping birds by what they like to eat. | No | <ul style="list-style-type: none"> • pictures of birds |
| Project: Sow Bug Environment | In this experiment, you will study the behavior of sow bugs. | No | |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 4: YOU ARE WHAT YOU EAT

| Assignment | Summary | Video Demo | Supplies |
|--------------------------|----------------------------------------------------------------------------------|------------|---------------------------------------------------------|
| Project: Breakfast Chart | In this project you will keep track of the foods you eat for breakfast. | No | <ul style="list-style-type: none"> paper |
| *Project: Lunch Chart | In this project you will keep track of the foods you eat for lunch. | No | <ul style="list-style-type: none"> paper |
| *Project: Dinner Chart | In this project you will keep track of the foods you eat for dinner. | No | <ul style="list-style-type: none"> paper |
| *Project: Chart Totals | In this project you will look at the types of food you eat during an entire day. | No | <ul style="list-style-type: none"> paper |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 5: PROPERTIES OF MATTER

| Assignment | Summary | Video Demo | Supplies |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------|
| Experiment: Be A Chemist | In this experiment, you will experiment with matter. | No | <ul style="list-style-type: none"> a pan of water a cup of sand |
| Experiment: Volume | In this experiment, you will find the volume of different objects. | No | <ul style="list-style-type: none"> two different sizes of books metric ruler (with millimeter markings) |
| *Experiment: Think About Mass | In this experiment, you will understand that objects can have different weights and masses. | No | <ul style="list-style-type: none"> book |
| *Experiment: Is Air Matter? | In this experiment, you will test the mass of air. | No | <ul style="list-style-type: none"> two balloons of the same size, the larger the better |
| *Project: Matter List | You have learned that matter has different properties. Not all matter is the same. In this project you think about different kinds of matter. | No | <ul style="list-style-type: none"> paper |
| *Experiment: Is Water Matter? | In this experiment, you will test the mass of water. | No | <ul style="list-style-type: none"> small diet scale cup |
| Experiment: Mass Measurement | In this experiment, you will test compare the mass of matter in different states. | No | <ul style="list-style-type: none"> food scale that reads in grams |
| *Experiment: Melting Ice Cubes | In this experiment, you will study how temperature affects ice cubes. | No | <ul style="list-style-type: none"> 5 paper cups 5 ice cubes refrigerator |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 6: SOUNDS AND YOU

| Assignment | Summary | Video Demo | Supplies |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------|
| Experiment: Vibrations | In this experiment, you will experiment with sound vibrations from a drum. | No | <ul style="list-style-type: none"> • drum • pencil |
| Experiment: Sound Patterns | In this experiment, you will experiment with sound vibrations from a drum. | No | <ul style="list-style-type: none"> • a partner • ruler |
| Report: Read and Write About Sound | You have learned how sounds are made and how they travel. In this report you will use books to learn more about sound. | No | <ul style="list-style-type: none"> • a book about sound. |
| Experiment: High And Low Sounds | In this experiment, you will study how vibration speed affects sound. | No | <ul style="list-style-type: none"> • strong box, open on one side |
| *Experiment: Loud or Soft? | In this experiment, you will experiment with sound vibrations from a coffee can. | No | <ul style="list-style-type: none"> • coffee can with plastic lid |
| Experiment: Think About Hearing | In this experiment, you will compare how well sounds are heard. | No | <ul style="list-style-type: none"> • a clock that ticks • yardstick |
| *Report: How Animals Hear | In this report you will learn how animal ears hear sound. | No | <ul style="list-style-type: none"> • research materials |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 7: TIME AND SEASONS

| Assignment | Summary | Video Demo | Supplies |
|-----------------------------------|----------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------|
| Experiment: The Earth | In this experiment, you will understand that it cannot be light all over the earth at once. | No | <ul style="list-style-type: none"> • bright flashlight • paper towel tube |
| Experiment: Night | In this experiment, you will understand that when one side of the earth is light the other side is dark. | No | <ul style="list-style-type: none"> • lamp |
| *Experiment: The Earth's Rotation | In this experiment you will use a model to learn more about the earth's axis. | No | <ul style="list-style-type: none"> • clay • pencil |
| Experiment: Different Times | In this experiment, you will understand that it is day during different times around the world | No | <ul style="list-style-type: none"> • flashlight • globe |
| *Report: Months | In this report you will learn more about months of the year. | No | <ul style="list-style-type: none"> • research materials |

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| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |
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UNIT 8: ROCKS AND THEIR CHANGE

| Assignment | Summary | Video Demo | Supplies |
|-------------------------------------|--------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------|
| Experiment: Bubbling Grains of Rock | In this experiment, you will watch how vinegar reacts with limestone | No | <ul style="list-style-type: none"> a piece of limestone a pocket knife |
| Report: Mount Rushmore | In this report you will learn about the rocks of Mount Rushmore. | No | <ul style="list-style-type: none"> research materials |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 9: HEAT ENERGY

| Assignment | Summary | Video Demo | Supplies |
|------------------------------------|----------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------|
| Experiment: Feeling Friction | In this experiment, you will use friction to create heat. | No | <ul style="list-style-type: none"> Wood Sandpaper |
| Experiment: Oxygen and Fire | In this experiment, you will understand that fire needs oxygen to burn. | No | <ul style="list-style-type: none"> 3 candles in holders 1 quart jar 1 pint jar |
| *Experiment: Static Electricity | In this experiment, you will create static electricity. | No | <ul style="list-style-type: none"> a small flat box plastic food wrap |
| Experiment: Water Molecules | In this experiment, you will understand that water molecules move faster in hot water. | No | <ul style="list-style-type: none"> two clear glasses food coloring hot water |
| Experiment: Changing Liquid to Gas | In this experiment, you will understand that heat can change liquid into gas. | No | <ul style="list-style-type: none"> an adult to help you use the stove a one cup measure water |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

UNIT 10: REVIEW

| Assignment | Summary | Video Demo | Supplies |
|-------------------------------------|--------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------|
| Project: Rock Collection | In this project, you will write about rocks. | No | <ul style="list-style-type: none"> • 5 different rocks |
| Experiment: How Sound Travels | In this experiment, you will understand that sound can travel through objects. | No | <ul style="list-style-type: none"> • string • chair |
| Experiment: Temperature Comparisons | In this experiment, you will study how color affects temperature. | No | <ul style="list-style-type: none"> • 2 small cardboard boxes (same size) • black paper |
| *Special Project | Use this Special Project template to create your own assignment for this unit. | N/A | N/A |

* indicates an alternative assignment